Claims

1. A device for producing a gas cushion for supporting a preheated glass sheet (2), with a chamber (7) connected to a source (21) of compressed gas, the upper wall (10) of which chamber is adapted in its external dimensions to the outline of the glass sheet (2) and has a plurality of apertures (15) for the passage of gas,
characterised in that
the apertures are designed as nozzles (14), which have an entry bore (22) as well as a progressively widening exit hole (16), and that the upper wall (10) of the chamber (7) has a greater degree of perforation (sum of the nozzle exit areas (15) in relation to the total area of the respective zone (11; 12; 13)) in its edge zones (12, 13) than in its central zone (11).

2. The device according to claim 1, characterised in that the central zone (11) of the upper wall (10) of the chamber (9) roughly corresponds in the magnitude of its area to the sum of the edge zones (12, 13).

3. The device according to claim 1 or 2, characterised in that the ratio of the degree of perforation in the central zone (11) of the upper wall (10) of the chamber (7) to the degree of perforation in the edge zones (12, 13) amounts to approx. 0.5 to 0.9, preferably approx. 0.7 – 0.8.

4. The device according to any one of claims 1 to 3, characterised in that the upper wall (10) of the chamber (7) has a degree of perforation of at most approx. 0.3, preferably less than 0.25, in its central zone (11).

5. The device according to any one of claims 1 to 4, characterised in that the upper wall (10) of the chamber (7) has a greater degree of perforation in the edge zones (12) of its longer sides than in the edge zones (13) of its shorter sides.

6. The device according to any one of claims 1 to 5, characterised in that the degree of perforation of the upper wall (10) of the chamber (7) diminishes from the feed side for the glass sheet (2) to the opposite side.

7. The device according to any one of claims 1 to 6, characterised in that the entry bore (22) of at least one of the nozzles (14) widens at least once abruptly in the direction of flow.

8. The device according to claim 7, characterised in that the entry bore of the nozzles (14) has a first section with a diameter of approx. 2 to 4 mm, preferably of approx. 3 mm, as well as a second section (18) with a diameter of approx. 20 mm, whereby the exit hole (16) follows on from the latter.

9. The device according to claim 8, characterised in that the entry bore of the nozzles (14) has a third section (19) with a diameter of approx. 10 mm between the first and second section (17, 18).

10. The device according to claim 9, characterised in that at least the first, the second and the third section (17, 18, 19) are formed cylindrically, preferably with a coinciding cylinder axis.

11. The device according to any one of claims 1 to 10, characterised in that the upper wall (10) of the chamber (7) is covered by a thin porous cloth (20) made of heat-resistant material.

12. The device according to claim 11, characterised in that the cloth (20) is made of heat-conductive material, preferably of corrosion-resistant steel (stainless steel).

13. The device according to any one of claims 1 to 12, characterised in that the chamber (7) is made of ceramic material.

14. The device according to claim 13, characterised in that the chamber (7) is designed as a one-piece moulding.

15. The device according to any one of the preceding claims, characterised in that the chamber (7) is provided with heating elements.